

ABSTRACT

A method for automatically creating a database of parameters (e.g., fingerprints/landmarks) used in a media sample recognition system. The user places a media sample in his media player, e.g., a CD or DVD player in his personal computer. A software process installed on the user's personal computer, to which is connected the CD/DVD player, extracts the constellation or "raw parameters" from the CD tracks as the CD plays, or under control of the software process. This extraction process may operate in the background. These raw parameters are then transmitted via the Internet (or other computer network) to a server coupled to a recognition database. The raw parameters are stored in the database. At some point in time, the raw parameters are processed into fingerprint/landmarks (e.g., using linkage) using another software process and then stored either back in the database or in random access memory (RAM) for use during a subsequent recognition process. The media sample can also be simultaneously identified during playback, which identity information is then sent to the server coupled to the recognition database.

SUMMARY OF THE INVENTION

[0007] The present invention solves these and other problems by providing method and apparatus for interacting with an on-line community providing access to a large number of media files and a database of metadata related to the media files available from its users to process segmented portions of each media file to create additional metadata that can be subsequently used to create constellations and fingerprints for each media file for use in the recognition algorithm to be employed. By creating processed metadata from each file that can be then stored for use in a recognition database or further processed, for use in the algorithm being actually employed by the recognition process at a later date, the present invention probably avoids violating copyright protections, as the processed metadata may not be protectable and as no copy of the original file is created, even temporarily, in the process of the present invention. Thus, the present invention enables an automatic and inexpensive technique for creating the necessary database for use in the media recognition systems set forth in the above-mentioned U.S. Patent Applications.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG 1 shows a block diagram of an exemplary embodiment of a system according to one aspect of the present invention.

[0009] FIG 2 shows a block diagram of a second exemplary embodiment of a system according to another aspect of the present invention.

[0010] FIG 3 shows a block diagram of a third exemplary embodiment of a system according to another aspect of the present invention.